

Research Article

**Internally Generated Revenue, Corruption, Governance And Economic Growth In Nigeria**

Samuel O. Dada<sup>a</sup>; Olusola O. Okedina<sup>b</sup>; Yimka S. A. Alalade<sup>c</sup>,  
Apollos N. Nwaobia<sup>d</sup>

<sup>a,b,d</sup>Department of Accounting, School of Management Sciences, Babcock University, Ilishan Remo, Ogun State, Nigeria

<sup>c</sup>Department of Finance, School of Management Sciences, Babcock University, Ilishan Remo, Ogun State, Nigeria

Email: <sup>a</sup>dadas@babcock.edu.ng, <sup>b</sup>alphookedina@gmail.com, <sup>c</sup>alalades@babcock.edu.ng, <sup>d</sup>nwaobiaa@babcock.edu.ng

**Abstract**

Economic growth of Nigeria has been acclaimed to be affected by the inability to raise enough internally generated revenue to provide economic growth stimulus. Studies have shown that economic growth can be stimulated by internally generated revenue, corruption and governance. Ex post facto research design was adopted using Nigerian economy while internally generated revenue, corruption, governance and economic growth were modeled using Autoregressive Distributive Lag Model (ARDL). The study found that IGR, CPI and GI jointly had positive and significant effect on economic growth. It recommended that government should establish policies that will drive internally generated revenue, reduce corruption and enhance governance to attain economic growth.

**Keywords:** *Corruption, Economic Growth, Governance, Internally Generated Revenue*

**Introduction**

Nations earn revenue from foreign activities carried out by her government in form of external or foreign trade or from domestic activities referred to as internally generated revenue. Externally generated revenue is subjected to foreign exchange risks and volatilities in the international market occasioned by varying policies and divergent interest of various nationals involved in the trade on one hand and market competition on the other hand. With this instability associated with external revenues earnings, to plan for economic growth and sustainable development becomes relatively difficult with the use of revenue generated externally (Asimiyu & Kizito, 2014). To achieve stable economic growth and development, several countries now focus on their internally generated revenue sources to which they have relative control over (Ukwame, 2015).

Economic growth has engaged the attention of man and his governments (Ukwame, 2015) through the provisions of public goods and services and improved standard of living of citizens. Asaolu, Olabisi, Akinbode and Alebiousu (2018) opined that a nation is experiencing economic growth when there is a persistent annual increase in the well-being of her people. According to Ayeni, Ibrahim and Adeyemi (2016), a nation economy grows when there is an increase in the value of goods and services produced in that country over a period. For any nation to achieve her dream, goal or plan for her citizens, there is need for revenue to be made readily available to actualize the set out economic growth objectives. Internally generated revenue, therefore, is seen as one of the basic requirements for economic growth of any nation.

Adegbie, Jaiyeoba and Kwarbai (2016) opined that economic growth and development of any nation depends on government's ability to generate adequate revenue to effectively provide for various needs of her teeming population. This was supported by Onakoya, Afintinni, and Ogundajo (2017) as they submitted that developing countries are unable to show significant economic growth owing to their inability to generate sufficient amount of revenue. Revenue generation is intrinsic and central to the path to modern economic development (Nnansseh & Akpan, 2013).

In Nigeria, Asimiyu and Kizito (2014) observed that economic growth, development and sustainability of any state depend on their internal revenue generation ability to supplement the revenue allocation from federation account. In the study of Abiola and Ehigiamusoe (2014) internally generated revenue (IGR) denotes the revenue that the federal, state and local governments generate within their respective areas of jurisdiction; independent of their share of revenue from the federation account (Deloitte, 2016). Since all tiers of government have ability to generate revenue internally, internally generated revenue therefore can also be seen as the revenue generated through separate and independent effort of each tier of government-federal, state or local.

Nigeria's ability to earn sufficient internally generated revenue from her vast mineral resources and other revenue generating economic potentials has remained a mirage as the nation is faced with problems of corruption (Ajaz & Ahmad, 2010; Brondolo, Silvani, Borgne, & Bosch, 2008). Corruption distorts the ability of government to collect taxes and impedes economic growth and development (Mustapha, Eric, Koh, Chan, & Ramly, 2017). Only connected individuals benefits from corruption (Gupta, Davoodi & Alonso-Terme, 2002) with negative influence on revenue, leading to lower revenue and the inability of government to finance various economic growth enhancing programmes (Oguzhan & Gunlap, 2012). Omodero, Ekwe and Ihendinihu (2018) opined that corruption leads to a decrease in revenue made available for procurement of public goods and services as well as for infrastructural development.

Ajaz and Ahmad (2010) also identified governance and political instabilities as another problem affecting economic growth and revenue associated with developing countries. According to Carega and Weingast (2011), good governance and appropriately designed institutions are essential for economic growth as governance reduces uncertainty, transaction, search and production costs, and ultimately affect economic growth (Ndogbo & Fouda, 2012). Governance has, therefore, become an important tool through which government programmes can be imagined and realized. Corruption exists in close tie with governance and

both are symptoms and outcomes of institutional deficiency or governance structure and have influence on economic growth (Mehmet & Nandini, 2012; Jonada, 2014).

This paper empirically studies the effect internally generated revenue, corruption and governance on economic growth of Nigeria using Autoregressive Distributive Lag Model. Theoretical explanations of the relationship among internally generated revenue, corruption, governance and economic growth is quite extensive. According to Olaoye and Adedeji (2017); Ofoegbu and Alonge (2016); Abiola and Ehigiamusoe (2014); Asimiyu and Kizito (2014); Siyanbola, Dada, and Olusola (2014); Olusola and Siyanbola (2014); Nnanseh and Akpan (2013) and Adenugba and Chike (2013) internally generated revenue has positive and significant effect on economic growth. This view was opposed to by Gbato (2017) as the study showed that taxation does not impact on economic growth in the long run.

While studies such as Omodero (2019); Ogbonnaya (2018); Basem, Abdulkarsem, Elham & Basim (2016) and Danilo, Mladen & Dusan (2016) relating to this study indicated that corruption has negative significant effect on economic growth and development, studies which include Nguyen, Mai and Tran (2017) with Trabelsi and Trabelsi (2017) found a nonlinear relationship exist between the two variables. Further findings such Afolabi (2019); Anas (2017); Mobolaji and Omoteso (2014); and Ajaz and Amad (2010) showed the effect of governance on economic growth with positive influences but none of the studies reviewed examined the effect of internally generated revenue, corruption and governance on economic growth using Autoregressive Distributive Lag Model (ARDL) technique to test for the presence of co-integration among the variables under consideration.

## **Review of Related Literature**

This section describes the concepts used in this study, the theories and concludes with review of relevant empirical works.

### **2.1 Conceptual Review**

#### **2.1.1 Internally Generated Revenue**

The term revenue has been described in different ways by different schools of thoughts. Revenue can be defined as the fund required to finance government activities in the public (Nkanor & Udu, 2016; Olusola, 2011; Nightingale, 2002). According to the S.162 (10) of 1999 Constitution of the Federal Republic of Nigeria (Amended), revenue can be defined as any income or returns accruing to, or derived by the government from any property belonging to government, any return by way of interest on loans and dividends in respect of shares or interest held by the government (Nigerian Constituion, 1999). Revenue generation in Nigeria is said to be dwindling as a result of weak controls in the systems of revenue collection and workers attitude (Alao & Alao, 2013).

Revenue can be generated from external activities as well as from internal source referred to as internally generated revenue which forms the focus for this study. Internally generated revenue excludes subventions, allocation and grants received from federation account or aids from other governments. Federal, states and local governments have their different sources of internally generated revenue (Siyanbola, Dada, & Olusola, 2014). At the local government level, internally generated revenue sources are avenues by which local government generates money within its geographical boundary (Okolie & Eze, 2004) and there are traditional sources of revenue for local governments which they rely upon if external revenue sources

failed (Okeke, Mba, & Eme, 2017). Several studies have been conducted on the role of internally generated revenue on local governments in Nigeria. Amin (2018); Ironkwe and Ndah (2016); Olusola and Siyanbola (2014) opined that IGR promotes economic growth at this level of government. However, the situation at present shows that the state governments have usurped the power of the local government at collecting revenue (Eteng & Agbor, 2018; Ironkwe & Ndah, 2016).

According to Adesoji and Chike (2013) and Abiola and Ehigiamusoe (2014) internally generated revenues are the revenues that are derived within the state; it also include Pay as You Earn (PAYE) of individuals (National Tax Policy, 2012). Studies including Abiola and Ehigiamusoe (2014); Adenugba and Chike (2013); Nnanseh and Akpan (2013); Nkanor and Udu (2016); Oladejo and Alade (2017) and Siyanbola, Dada & Olusola (2014) showed that internally generated revenue contributed significantly and positively to economic growth and infrastructural developments of various states government in Nigeria. According to Oti and Odey (2017) internally generated revenue enhances capital expenditure which in turn promotes economic growth. Dang, Bako and Lalu (2018); Okeke, Mba and Eme (2017); and Ekpo and Inyikalum (2016) indicated that IGR is not significant in impacting on social service delivery and economic growth.

The sources of federal government internally generated revenue include mineral rights, mining and extractions fees, fines and penalties among others (Nigerian Constitution, 1999). Raising revenue is an essential task of the country and before a country can protect her citizens, provide justice or administer a bureaucracy, it needs to raise sufficient amount of money. Several needs for internally generated revenue in Nigeria have been identified. The effect of the declining global oil prices, the glut in the global oil market, the quest for better life for the people among others needs are evidenced by different literatures of accounting, developmental economics and finance on the Nigerian economy is pushing the federal, states and local governments to evolve strategies that would increase their internally generated revenue (IGR). This coupled with global policy shift from the use of non renewable energy such as fossil fuel to renewable energy from solar and fluctuations in demand for oil at the international market widen the revenue deficiency gap.

Despite the need for internally generated revenue, the nation has however not been able to meet up with her revenue target. Corruption as a Nigerian factor from time has been identified as an inhibiting factor in revenue generation. Ezeani (2004); Ikejiani-Clark (2001) shared this view profusely as they argued separately that there is growing rate of corruption and fraud in the especially in Nigerian local government system.

From various studies reviewed, it can be deduced that internally generated revenue influences economic growth. Internally generated revenue has been demonstrated to bear positive or negative effect on economic growth and economic development at sub national and national levels of government in Nigeria. So, this study seeks to establish the effect of internally generated in conjunction with corruption and governance on economic growth of Nigeria.

### **2.1.2 Economic Growth**

One of the main policy trusts of any country's government is to achieve real economic growth of her economy. Economic growth of a country can be measured using the rate of growth in economic activities undertaken each year in the country and it can also be referred to as an increase in the value of goods and services produced by a nation over time (Ayeni,

Ibrahim & Adeyemi, 2017). Economic growth of a nation can be seen in improved standard of living of the citizens through the provision of public goods and services (Asaolu, Olabisi, Akinbode & Alebiousu, 2018; Ayeni, Ibrahim & Adeyemi, 2017; Adegbe, Jaiyeoba & Kwabai (2013); Brautigam & Knack, 2004). Economic growth of a nation can be measured using the Gross Domestic Product (GDP).

The Gross Domestic Product (GDP) has been defined in so many ways in different studies. According to Sheiner & Dynan, 2018, Gross Domestic Product is one of the main indicators or metrics for measuring how healthy the economy of a country performs and the Gross Domestic Product (GDP) can also be used to determine the standard of living of individuals within the country (Asaolu, Olabisi, Akinbode & Alebiousu, 2018). It can be defined as the increase in the value of goods and services produced by a nation over time (Ayeni, Ibrahim & Adeyemi, 2017) based on the market value of goods and services produced and recognized within the country (Onuoha, Ibe, Njoku, & Onuoha, 2015).

There have been various arguments and counter arguments as to whether GDP should be viewed as a measure of aggregate economic well-being and economic growth. Some studies which include Adesoji and Chike (2013); Coyle (2014) and Masood (2016) argued that GDP as a measurement offers low explanation to economic growth. However, various studies such as Pilling (2018) and Sheiner and Dynan (2018) offered that GDP as a measurement offers much explanation to economic growth. The focus of this study is the real GDP which is used to capture the economic growth of Nigeria.

The real gross domestic product (RGDP) is a macroeconomic variable that measures the value of goods and services produced in a country for a given year after making adjustment for price changes caused by either inflation or deflation. It determines the purchasing power net of price changes for a given year and it provides a more accurate measure of economic (Omodero, *et al*, 2018; Sheiner & Dynan, 2018). Real GDP accounts for inflation and deflation. It transforms the money-value measure, nominal GDP, into an index for quantity of total output.

### **2.1.3 Corruption**

Corruption is a phenomenal problem that is seen in every country of the world but in different measures. There appear to be no single, generally acceptable definition of corruption because of its different behavior and hidden nature. According to Transparency International (2013) corruption can be defined as the abuse of entrusted power for private gains Also corruption is can be defined as the abuse of public office or power for private gain (World Bank, 1997). Generally, corruption is driven by personal interest. It thrives very well in nations or countries where personal interest is placed far higher above the national interest (Jonada, 2014).

In Nigeria, corruption can be seen from political and administrative perspectives. Martini (2014) acclaimed that corruption served as a way of extracting funds from the nation and also as a means of preserving political power. Nigerians wake up each day to news of one form of corruption or the other ranging from abuse of office, collection of illegal tolls; smuggling of arms and drugs peddling; trafficking in persons; illegal oil bunkering to sex for grades (Tolu & Ogunro, 2012; Ogbonnaya, 2018).

Ogbonnaya (2018) identified regulator and authorizations as major causes of corruption. Another cause of corruption in Nigeria, according to Alege, Adamu and Muhammad (2014)

is the nature of Nigeria's political economy, the weak institutions of government, a dysfunctional legal system, and absence of clear rules and codes of ethics. Other causes of corruption in Nigeria include low salaries and remuneration package, poor working conditions, culture of affluent and ostentatious living expecting so much from people and political office holders, family pressures, peer pressures, village or ethnic loyalty, competitive ethnicity and lack of social amenities and infrastructures.

Nigerian government has however made concerted effort aimed at fighting corruption just as corruption appears to be untractable. The main source of law dealing with corruption in Nigeria is the Criminal Code Act established in 1916 (Criminal Code Act 1990; Alege, Adamu & Muhammad, 2014). Also the Independent Corrupt Practices and other Related Offences Act 2000; and the Economic and Financial Crimes Commission Act 2003 were established with the task of investigating, arresting and charging any offenders with corrupt practices either economic or financial crimes in Nigeria to court. The Money Laundering (Prohibition) Act 2011 as ammended in 2012 and the Nigeria Financial Intelligence Unit which draws its power from the Money Laundering (Prohibition) Act were designed to facilitate the detection of money laundering activities in Nigeria.

Corruption is though difficult to measure as a result of the different form it can be seen and nature it takes. However, different international organizations have come up with different indices that can be used to capture it. Corruption perception indices can be used to express the level of corruption in a given country based on survey and expert assessment. These indices can be obtained from institutions such as the World Bank's Control of Corruption Index (WB), the Transparency International's Corruption Perception Index (CPI) and the Corruption Index of the International Country Risk Guide (ICRG).

#### **2.1.4 Governance**

Although several scholars (Bevir, 2009; Benz, 2010; Hale & Held, 2011; Levi-Faur, 2012) have worked on this concept, the definition of governance and its usage still depends largely on its approach, context and discipline. Tamyko, Albareda and Forberger (2014) traced the etymology of governance to the Greek and Latin words: "kybernan" and "gubernare"; meaning to pilot or ship and to direct, guide and rule respectively. They acclaimed that the meaning of governance has changed rapidly as government can now be said to mean an interaction between governments, business stakeholders and not-for-profit organizations where decisions and policies are taken and implemented.

The meaning of governance varies with the approach, research field, discipline, and the theoretical context (Bevir, 2009). However, World Governance Indicators, (2019) said governance is consists of the traditions and institutions used in exercising control or power; the basis in which governments are formed, checked and changed in any country. The institute reports governance indicators as an aggregate and individual governance indicator while offering six dimensions of governance: Voice and Accountability; Political Stability and Absence of Violence and/or Terrorism; Government Effectiveness; Regulatory Quality; Rule of Law; and Control of Corruption.

#### **2.1 Theoretical Review**

This study is hinged on Endogenous Growth Theory. According to Wang (2018), study on growth theory began in 1937 by von Neumann when he propounded the linear production and balanced growth model. Some other studies on growth theories: Solow (1956); Arrow (1969);

and Pitchford (1990). These studies account for long term economic growth using exogenous factors. The concept of endogenous growth evolved in the 1980s when it was proved that economic growth was not occasioned by external forces. Paul M. Romer was acclaimed as the first to have worked on endogenous growth theory in 1986 (Romer, 1986; Jones, 2019). Lucas (1988); Sergio (1991) and Ortigueira and Santos (1997) opined that economic growth is a function of human capital, knowledge innovation and inventive skill development but not as a result of technological change. This view was supported by Fine (2000) where economic growth was described as a product of internal forces. Endogenous growth theory, therefore, believes that economic growth can be attained through human development, invention and innovativeness requiring participation of public and private sectors of the economy to providing the required technological drive and inventive supports towards attaining economic growth.

Endogenous growth theory provides support for efforts and policies of government towards driving internally generated revenue capability within the national and subnational government in line with extant rules and regulations (Omodero, Ekwe & Ihendinihu, 2018; Akcigit & Kerr, 2018). According to Romer (2018), government legislations aimed increasing internally generated revenue through taxation can lead positive or negative economic growth of a nation. Endogenous growth theory can be used to explain economic growth using the concept of increasing returns to scale (Zhang, 2018). The endogenous growth theory has its limitations as the theory has not been able to provide adequate explanation on conditional convergence or catch up effect where less developed economies tend to grow faster than the developed ones. Another limitation of endogenous growth theory is that it has not offered explanation on why the countries are not equal or at par in term of wealth (Fagan, Gaspar, & McAdam, 2016). Also endogenous growth theory does consider that nations of the world have different growth rates (Laeven, Levine, & Michalopoulos, 2015).

## **2.2 Empirical Review of Related Studies**

Numerous studies have been conducted on tax, revenue, internally generated revenue, corruption, and governance on economic growth. However, few works have been done on composite of internally generated revenue, corruption, governance and economic growth with results varying across different nations of the world and adopting different methodologies. This section of the work examines the empirical works from previous studies.

The position of the empirical literature on the effect of internally generated revenue, corruption and governance on economic growth of Nigeria is slim although many researchers found evidence for a positive and significant effect of internally generated revenue on economic growth. In addition, evidences of positive and negative effect of corruption on (economic) growth have been found. The studies of Akai and Sakata (2002); Muhammad, Roshaiza and Muhammad (2014); Onakoya, Afintinni and Ogundajo (2017) revealed that tax revenue promotes economic growth at the international level. Although Muhammad, Roshaiza, and Muhammad (2014); and Okwori and Sule (2016) identified a bidirectional relationship between tax revenue and economic growth, Gbato (2017) opined that tax revenue does not impact on economic growth in the long run.

Gbato (2017) examined the impact of taxation on long-run growth of sub-Saharan Africa with data obtained from a sample of 32 countries in the region between 1980 and 2010 using

cointegration test. The result of findings indicated that taxation does not impact on economic growth in the long run. Onakoya, Afintinni and Ogundajo (2017) studied the impact of taxation on economic growth in Africa from 2004 to 2013 using Augmented Dickey Fuller (ADF) test, Shin W-stat tests and found that tax revenue has positive relationship with Gross Domestic Product and promotes Economic Growth in Africa.

Okwori and Sule (2016) studied revenue sources and economic growth in Nigeria using cointegration test. Findings from the study shows that oil revenue and non-oil revenue has a positive relationship with economic growth and suggests that an increase in oil and non-oil revenue by one percent lead to an increase in gross domestic product by 0.21% and 0.25% respectively. Okwara and Amori (2017) analysed the impact of tax revenue on the economic growth in Nigeria between 1994-2015. The results indicated that non-oil income has significant impact on economic growth.

Omodero, Ekwe and Ihendinihu (2018) in their work examined the impact of internally generated revenue (IGR) on economic development of Nigeria from 1981 to 2016. The result of findings showed that internally generated revenue has robust and significant positive impact on RGDP and that there is high correlation between the dependent and independent variables and concluded there is no physical evidence to provide support of this in reality.

Diverse empirical studies have examined the effect of corruption on economic growth with with divergent results. Some studies found that corruption has negative effect on growth, others found a positive effect of corruption on growth while some other distinguished between negative and positive corruption.

In Nigeria, Ogbonnaya (2018) presents corruption as an hinderance to economic growth. Also, corruption has offered a decrease in availability of fund meant for government productive hence a decline in economic growth (Fabayo, Posu, & Obisanya, 2011). Apart from these studies, it is generally believed that if corruption in Nigeria is reduced, the nation's economy will improve as more fund diverted away by corruption will be made available for economic purposes.

Danilo, Mladen and Dušan (2016) appraised the causality between corruption and level of GDP of countries from 1995 to 2011 using panel data. Corruption was proxy by using corruption perception index as provided by Transparency International and GDP data was obtained from the World Bank. The result of the study shows that there is negative correlation between corruption and economic growth with the strongest causality between corruption and economic growth occurring in the medium term.

Ogbonnaya (2018) examined the effect of corruption on Nigeria economy using data obtained from the World Bank and Transparency International database. The result of findings showed that corruption exert significant negative impact on Nigeria's economy. Also Omodero (2019) used data obtained from World Bank Development Indicators and Transparency International to examine the implication of corruption on Nigeria's economic progress from 2008 to 2018. Findings from the study also indicated that Nigeria's corruption ranking has a significant negative impact on the nation's economic growth.

Corruption was also found to have positive relationship with economic growth. For instance, using Fischer test, Random test, Wald  $\chi^2$  test and t test, Ondo (2017) examined the relationship between corruption and economic growth in the Economic and Monetary Community of Central Africa countries from 2005 to 2015. Findings from the study showed



that corruption propels economic growth of the member countries as corruption was seen as lubrication on the the wheels of administrative burden that inhibits access to basic public goods.

Also, some other studies on corruption and economic growth indicated nonlinear relationship exists between the two variables. Studies which include Ahmad, Ullah and Arfeen (2012); Nguyen, Mai and Tran (2017); and Trabelsi and Trabelsi (2017) argued that corruption can promote or suppress growth. Wouter and Albert (2009) examined the effects of corruption on economic growth in an institutional settings. The study established that where there is institution settings, corruption inhibits growth and where there are no institution settings or where institution settings are not well developed corruption may enhance growth. Nguyen, Mai and Tran (2017) analyzed the impact of corruption on economic growth between 2004 and 2015 with the use of Deep Gaussian Mixture Models (D-GMM) and quantile regression. The result of the study reveals corruption impacts on economic growth at different quantile.

Studies such as Ajaz and Ahmad (2010) conducted on the effect of corruption and governance on tax revenue using GMM indicated that governance and corruption are determinant of tax revenue. The study concludes that while corruption has negative effect on tax collection, governance contributes to better revenue collection performance. Also Fayissa and Nsiyah (2013) investigated the impact of governance on economic growth of Africa using sub Sharan Africa. The result shows that presence of good governance or absent of good governance contributes to the economic growth between richer and poorer African countries.

Emara and Chiu (2016) studied the impact of governance on economic growth of 21 selected countries in the Middle Eastern and North Africa (MENA) for the period 2009 and 2013. The result of the findings shows that the level of economic growth achieved by the MENA countries was not as a result of sound governance. Similarly, Mobolaji and Omoteso (2014) looked into the impact of governance indices on economic growth in some selected Sub-Saharan African (SSA) countries for the period 2002 to 2009. They found that political stability, regulatory quality, accountability and rule of law indices have significant positive impact on economic growth in the region but the impact of corruption control on economic growth is not very obvious.

In the study of Anas (2017), an examination of the relationship between governance and economic growth of Africa was carried out using data obtained from World Bank Governance Indicator. Regression analysis was used to analyze the data. The result of the examination shows that a unit change in governance index has the tendency of producing a 1.7 per cent increase in real GDP.

Afolabi (2019) measured the impact of governance on economic development in West African countries for the years 2002 to 2016 using the system GMM approach on all the six governance indicators. The results of findings show that voice and accountability, political stability, government effectiveness and rule of law are positively related to economic development, with government effectiveness demonstrating the highest impact. Further result shows that the regulatory quality and control of corruption have indirect relationship with economic development in the short-run. In the long-run, all governance indices have direct relationship with economic development in West African countries. The political stability and regulatory quality indices present the highest impact.

## Methodology

This study utilized the Real Gross Domestic Product RGDP as proxy for Economic Growth, internally generated revenue is the aggregate of non-oil revenue of the federal government, states and local government internally generated revenue. Corruption is proxy by Corruption Perception Index and Governance is captured using World Governance Index. The time series data span from 1981 to 2019 except for Corruption Perception Index and World Governance Index which started from 1995. The data are sourced from Central Bank of Nigeria, Transparency International and World Governance Institute.

The regression model is specified as:

$$RGDP = \alpha_0 + \beta_1 IGR_t + \beta_2 CPI_t + \beta_3 GI_t + \mu_0$$

Where

RGDP is the real gross domestic product,

IGR is the internally generated revenue

CPI is the corruption perception index

GI is the governance index

$\alpha_0$  is the intercept

$\beta_1, \beta_2, \beta_3$  are coefficients

$\mu_0$  is error terms capturing other variables that are not included in the study.

*A-priori* is based on economic theories concerning the signs and magnitude of the parameter estimate. The expected outcome for this study is that internally generated revenue will have a positive relationship with economic growth, corruption will have a negative relationship on economic growth and governance will have a positive relationship on economic growth.

Before Autoregressive Distributed Lag Model (ARDL) was used to analyze the effect of IGR, corruption and governance on Economic Growth of Nigeria, Unit root test was conducted on the data set using Augmented Dickey Fuller (ADF) to determine if the variables are stationary. The Autoregressive Distributed Lag Model (ARDL) technique was used to test for the presence of co-integration among the variables under consideration because of its flexibility in use regardless of the order of integration of the variables and its ability to account for long-run and short-run relationship.

To ensure the model complies with the basic assumptions of Ordinary Least Square, the following post estimation tests were carried out are: the serial correlation test; heteroskedasticity; stability test; normality test; and linearity test were conducted using Breusch-Godfrey Serial Correlation LM Test, Breusch-Pagan-Godfrey heteroskedasticity test, Cusum and Cusum square stability test, Jarque-Bera test and Ramsey Re-set test. The null hypothesis states there is no significant effect of internally generated revenue, corruption and governance on economic growth of Nigeria. The decision criterion for this test is that if the trace statistic value is greater than the critical value then reject null hypothesis. Econometric Views 9.0 (E-Views) analytical software was used for data analysis and model estimation. The results obtained are presented in the next section.

## Results and Discussion of Findings

This section presents the data analysis and results of findings.

#### 4.1 Descriptive Analysis, Correlation Matrix and Trend Analysis

This section of the analysis provides an overview of the data set. The descriptive analysis of the data series obtained is done through numerical representation shown in Table 4.1a. This table indicate the numerical representation such as the mean, median, maximum, minimum, standard deviation and other statistics of the variables- Real Gross Domestic Product in its linearized form (LRGDP), Internally Generated Revenue in its linearized form (LIGR), Governance Index (GI), and Corruption Perception Index Score (CPI). Correlation matrix, which indicate whether the variables are multi-collinear shown, is shown in Table 4.1b. Interpretation of data follows directly for each table.

**Table 4.1a Table Showing Result of Descriptive Statistics**

	<b>LRGDP</b>	<b>LIGR</b>	<b>GI</b>	<b>CPI</b>
Mean	4.459743	2.328314	-0.701000	12.41842
Median	4.362869	2.488243	-1.046903	15.00000
Maximum	4.843918	3.680716	0.000000	28.00000
Minimum	4.139226	0.650341	-1.431231	0.000000
Std. Dev.	0.243724	1.050821	0.581463	11.37370
Skewness	0.344411	-0.265146	0.349090	0.044295
Kurtosis	1.630051	1.598518	1.232085	1.302474
Jarque-Bera	3.722789	3.555155	5.720548	4.574948
Probability	0.155456	0.169047	0.057253	0.101523
Sum	169.4702	88.47594	-26.63801	471.9000
Sum Sq. Dev.	2.197843	40.85630	12.50969	4786.357
Observations	38	38	38	38

**Source: Researcher's Computation 2021**

Table 4.1a shows that the mean, the median and the standard deviation of all the variables lied within the maximum and minimum values. This indicates that the data are normally distributed. All the variables are positively skewed except LIGR which is negatively skewed. The standard deviation shows how far are the measures of the variable are from the mean or average value. Except CPI which has a large standard deviation and its measures far from the mean; LRGDP, LIGR and GI have low standard deviation and their measures are very close to the mean. This implies all the variables have low dispersion from mean with the exception of CPI which has large dispersion from mean. The Jarque-Bera statistics shows that the series are individually normally distributed since the p-values of all the series are individually statistically significant at 5% level.

**Table 4.1b Table Showing Correlation Matrix of the Data Set**

<b>Included observations: 38</b>				
<b>Correlation</b>	<b>LRGDP</b>	<b>LIGR</b>	<b>GI</b>	<b>CPI</b>
LRGDP	1.000000			
LIGR	0.950023	1.000000		
GI	-0.732172	-0.858666	1.000000	
CPI	0.937924	0.931750	-0.841687	1.000000

**Source: Researcher's Computation 2021**

Table 4.1b shows the correlation matrix among variables. Correlation among the variables was estimated to detect whether the variables have high multi-collinearity among themselves. According to Iyoha (2004) multi-collinearity exists among variables when the result of the correlation coefficient is greater than 0.95. The results of the correlation analysis of Table 4.1.3 show that the correlation coefficients among the variables: LRGDP, LIGR, GI and CPI are all not more than 0.95 which shows that there is no trace of multi-collinearity among the independent variables.

#### 4.2 Pre-estimation test

Unit root test was carried out to determine the stationarity of the series using Augmented Dickey-Fuller Test. The results are as shown in tables 4.2.1.

**Table 4.2.1 Unit Root Test: Augmented Dickey-Fuller Test (ADF)**

Variables	Level	1 <sup>st</sup> Difference	Order of Integration
LRGDP		-0.027818	I(1)
LIGR		-1.039211	I(1)
GI	-1.349081		I(0)
CPI	-0.680059		I(0)

**Source: Researcher's Computation 2021**

The ADF test is used to ascertain the order of integration of the variables. It was observed that the LRGDP and the LIGR variables were stationary at first difference, while GI and CPI were stationary at level at 1%, 5% and 10% level of significance. As a result of the order of integration of the variables, the study adopts the use of Autoregressive Distributive Lag (ARDL) Model.

#### 4.3 Test of Hypothesis

To test for the hypothesis, Internally Generated Revenue, Corruption measured by Corruption Perception Index (Score) and Governance measured by Governance Index (Estimate) are regressed on Economic Growth which is measured by Real Gross Domestic Product in multiple linear regression. The null hypothesis to be tested states that there is no significant effect of internally generated revenue, corruption and governance on economic growth of Nigeria. The decision is to reject the null hypothesis if the value of the trace statistic is less than the critical value. Otherwise it is rejected.

#### The ARDL Co-integration and Long Run Equilibrium

Here the dynamics of the ARDL specification for the estimation LRGDP, LIGR, CPI and GI in both long run and short is expressed using E Views 9. The results attained are indicated in Table 4.3a and Table 4.3b.

**Table 4.3a Table Showing the Result of LRGDP on LIGR, CPI and GI**

Dependent Variable: LRGDP				
Method: ARDL				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LRGDP(-1)	1.303228	0.162805	8.004851	0.0000
LRGDP(-2)	-0.393811	0.149942	-2.626416	0.0135
LIGR	0.022699	0.012317	1.842830	0.0753
CPI	0.000199	0.000873	0.227373	0.8217
GI	0.003626	0.012816	0.282954	0.7792

C	0.360381	0.208199	1.730947	0.0937
R-squared	0.996733			
Adjusted R-squared	0.996189			
F-statistic	1830.660			
Prob(F-statistic)	0.000000			
Durbin-Watson stat	1.918099			

\*Note: p-values and any subsequent tests do not account for model selection.

**Source: Researcher's Computation 2021**

The result of Table 4.3.a shows that the first and second lags of RGDP have significant effect on the current RGDP. The result further revealed that LIGR ( $p = 0.075$ ), CPI ( $p = 0.8217$ ) and GI ( $p = 0.7792$ ) have no significant effect on the LRGDP. All the variables are jointly significant with probability F statistic  $p=0.0000$ . The value of the adjusted  $R^2$  of 0.9961 indicates that 99.61% of variations in RGDP is explained by internally generated revenue, corruption and governance. The value of Durbin Watson for the model, 1.918 implies that there is no serial correlation among the variables as the value is close to 2.0. The probability of the F-statistics indicates that the explanatory variables are jointly significant. This suggests that the model has a good fit.

**Table 4.3b Table Showing the Result of ARDL Co-integration Long Run Form**

ARDL Co-integrating And Long Run Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LRGDP(-1))	0.393811	0.149942	2.626416	0.0135
D(LIGR)	0.022699	0.012317	1.842830	0.0753
D(CPI)	0.000199	0.000873	0.227373	0.8217
D(GI)	0.003626	0.012816	0.282954	0.7792
CointEq(-1)	-0.090583	0.052161	-1.736603	0.0927
Cointeq = LRGDP - (0.2506*LIGR + 0.0022*CPI + 0.0400*GI + 3.9785 )				
Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LIGR	0.250583	0.088731	2.824062	0.0083
CPI	0.002191	0.008806	0.248857	0.8052
GI	0.040034	0.125238	0.319665	0.7514
C	3.978455	0.110113	36.130658	0.0000

**Source: Researcher's Computation 2021**

CointEq (-1) is one period lag error correction term or residual. It guides the variables LIGR, CPI and GI of the system to return back to equilibrium or it corrects disequilibrium. For this to happen, this sign should be negative and significant. From Table 4.3.20 the coefficient is -0.090583 and it is significant at 5% level. This implies that the system corrects its previous period disequilibrium at the rate of 9.06% annually. This shows that the model identified the sizeable speed adjustment by 9.06% of disequilibrium correction yearly in order to attain long run equilibrium steady state position.

The estimated model is given by:  $LRGDP = 0.2506*LIGR + 0.0022*CPI + 0.0400*GI + 3.9785$ . A 1% increase in IGR is associated with 0.25% increase in RGDP holding CPI and GI constant while each additional score in CPI (mark) will cause the average value of RGDP

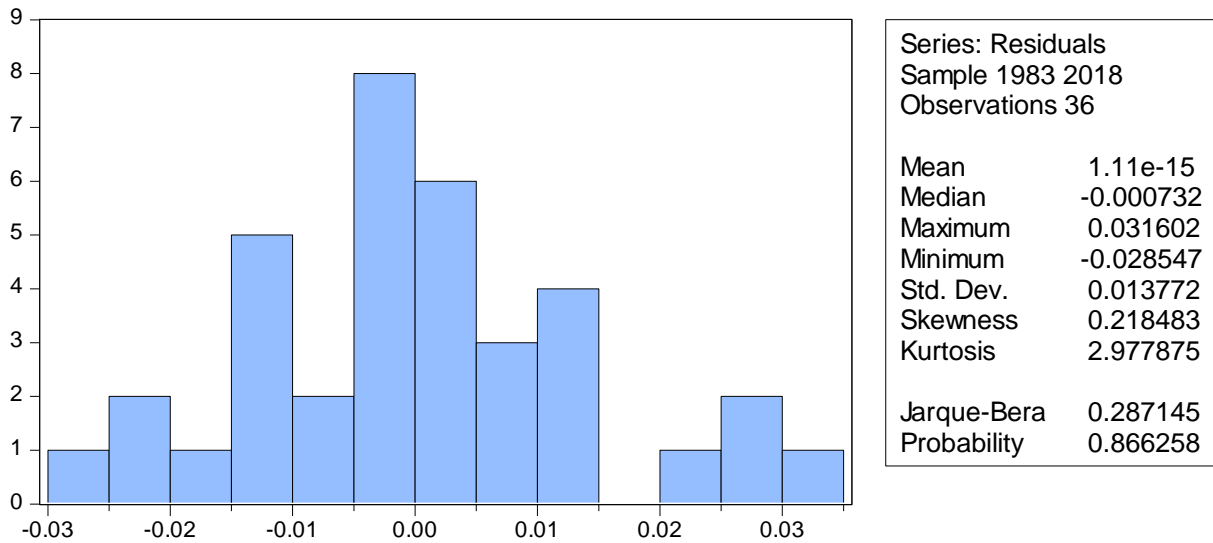
to increase by 0.2% holding IGR and GI constant. Also, a unit increase in GI, holding IGR and CPI constant, will lead to a 4% increase in the average value of RGDP.

**Post Estimation Test**

This is required to verify whether the estimates from the model involving LRGDP, LIGR, CPI and GI are reliable. The Jarque-Bera Normality test, Breusch-Godfrey Serial Correlation LM Test, Breusch-Pagan-Godfrey heteroskedasticity test, Ramsey Re-set test, and Cusum and CusumQ stability tests were carried out to ensure the model complies with the assumptions of Ordinary Least Square.

**Histogram-Normality of Residuals Test**

This test was carried out to ascertain whether the model follows a normal distribution pattern.



**Figure 4.1 Histogram Showing Histogram-Normality of Residuals Test**

**Source: Researcher’s Computation 2021**

Since the p-value of  $p = 0.866258$  is greater than 5% level of significance, then the residuals are said to be normally distributed based on Jarque-Bera approach.

**Test for Serial Correlation: Breusch-Godfrey Serial Correlation LM Test**

The Breusch-Godfrey Serial Correlation was used to test for the presence or absence of serial or autocorrelations in the model with the null hypothesis stating that there is no autocorrelation or serial correlation in the residuals up to the specified lag order. This holds if the p-value is greater than 5% level of significance. Otherwise, it is rejected.

**Table 4.4 Table Showing the Result of Breusch-Godfrey Serial Correlation LM Test**

<b>Breusch-Godfrey Serial Correlation LM Test:</b>			
F-statistic	0.064886	Prob. F(2,28)	0.9373
Obs*R-squared	0.166081	Prob. Chi-Square(2)	0.9203
R-squared	0.004613		
Adjusted R-squared	-0.244233		
Prob(F-statistic)	0.999992		
Durbin-Watson stat	1.883685		

**Source: Researcher’s Computation 2021**

From Table 4.3.22 above, the p-value (0.9373) is greater than 5% chosen level of significance. This indicates that there is absence of autocorrelation in the model. This is

further enhanced with a Durbin-Watson statistics of 1.8837. Hence, there is no suspicion of presence of autocorrelation in the model.

### Test for Heteroscedasticity

The Breusch-Pagan-Godfrey test was implemented to detect the presence of heteroscedasticity. The null hypothesis shows the absence of heteroscedasticity or equal finite variance while the alternative hypothesis shows the presence of heteroscedasticity or unequal finite variance. The decision criteria is to accept the null hypothesis if the F statistics probability value is greater than 5% critical value. Otherwise accept the alternate hypothesis.

**Table 4.5a Table Showing the Result of Breusch-Pagan-Godfrey Heteroskedasticity Test**

<b>Heteroskedasticity Test: Breusch-Pagan-Godfrey</b>			
F-statistic	2.050860	Prob. F(5,30)	0.0998
Obs*R-squared	9.170567	Prob. Chi-Square(5)	0.1025
Scaled explained SS	6.297997	Prob. Chi-Square(5)	0.2783

**Source: Researcher's Computation 2021**

The interpretation of the result from Table 4.3.23a reveals that the F statistics probability value (0.0998) is greater than the 5% critical value which leads to the acceptance of the null hypothesis, meaning that there is absence of heteroscedasticity or equal finite variance. This approach yields the same conclusion using ARCH Heteroscedasticity test (Table 43.23b).

**Table 4.5b Table Showing the Result of ARCH Heteroskedasticity Test**

<b>Heteroskedasticity Test: ARCH</b>			
F-statistic	0.002113	Prob. F(1,33)	0.9636
Obs*R-squared	0.002241	Prob. Chi-Square(1)	0.9622
F-statistic	0.002113		

**Source: Researcher's Computation 2021**

### Ramsey RESET Test

The Ramsey RESET Test is conducted to ascertain whether a linear relationship exists among LRGDP, LIGR and GI. Hence the null hypothesis is of the assumption that the model is linear or correctly specified.

**Table 4.6 Table Showing the Result of Ramsey RESET Test**

<b>Ramsey RESET Test</b>			
	Value	Df	Probability
t-statistic	1.429319	29	0.1636
F-statistic	2.042954	(1, 29)	0.1636

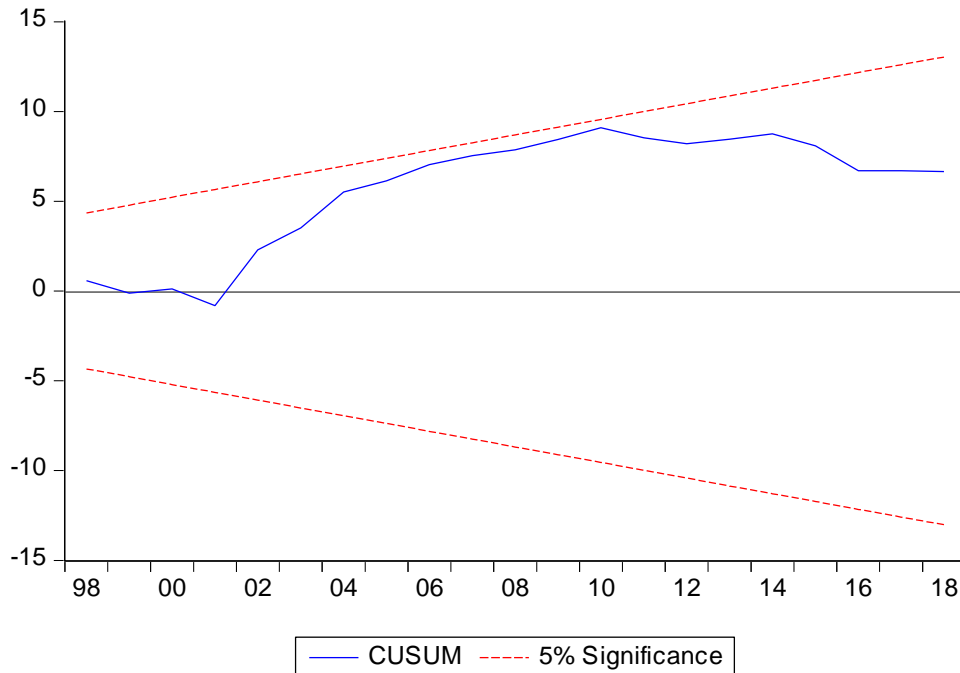
**Source: Researcher's Computation 2021**

The output from the Table 4.3.24 reports the test regression, the F-statistic and t-statistic for testing the hypothesis that the coefficients on the powers of fitted values from the regression are jointly zero, that is, the model is correctly specified. Therefore, the null cannot be rejected since the p-value (0.1636) is greater than 0.05.

### Cusum and Cusumq Stability Test

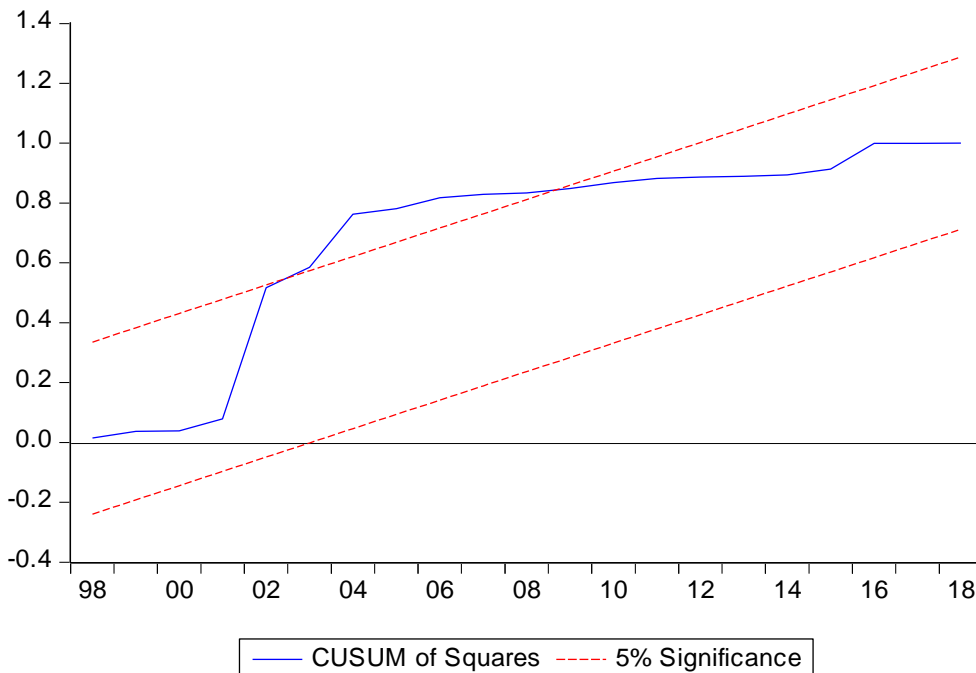
The CUSUM AND CUSUMQ test for stability is aimed to determine the appropriateness and the stability of the model. The test is used to show whether the model is stable and is suitable

for making long run decision. The test finds parameter instability if the cumulative sum goes outside the area between the two critical lines.



**Figure 4.2 Graph Showing CUSUM Test**  
**Source: Researcher’s Computation 2021**

The Figure 4.2 shows that the plot of CUSUM for the model being reviewed is within the five per cent critical bound. This therefore suggests that the parameters of the model do not suffer from any structural instability over the period of study. Hence, all the coefficients in the model are stable.



**Figure 4.3 Graph Showing CUSUMQ Test**  
**Source: Researcher’s Computation 2021**



The Figure 4.3 shows that the plot of CUSUMQ for the model being reviewed is majorly within the five per cent critical bound. This therefore suggests that the parameters of the model are somewhat stable over the period of study.

### **Decision and Discussion of Findings**

The joint statistical significance of the model indicates the study accepts the alternative hypothesis of this model which states that there is significant effect of internally generated revenue, corruption and governance on economic growth of Nigeria; hence the study will reject the null hypothesis. This result is consistent with the *a priori* expectation of this model. Therefore, the model of the study has achieved its objective, answered the question as well as tested the hypothesis.

The result of the findings is consistent with those of the Omodero, *et. al* (2018); Amin (2018); Olaleye and Adedeji (2017); Ofoegbu and Alonge (2016); Abiola and Ehigiamusoe (2014); Asimiyu and Kizito (2014); Nnanseh and Akpan (2013) and Adenugba and Chike (2013) as these studies showed that internally generated revenue has positive effect on economic growth and infrastructural developments. Also the result of this study aligns with those of Omodero (2019); Ogbonnaya (2018); Nguyen, *et. al* (2017); Basem, *et. al* (2016); Danilo, *et. al* (2016); Ibraheem, *et. al* (2013) as they all affirmed that corruption hinders economic growth and development. The findings from this study is also in conformity with those of Afolabi (2019); Anas (2017); and Fassiya and Nsiya (2013) as these studies acclaimed that governance indices promote economic growth. Findings from all these studies are in line with *a priori* expectation where increase in both LIGR and GI contribute to LR GDP and reduction in CPI (positive increase in corruption scores) also have positive result on LR GDP.

However, findings from this study is inconsistent with the findings of Gbato (2017); Ondo (2017) which showed that corruption has positive impact on economic growth; and Emara and Chiu (2016) which indicated that the level of economic growth attained in Middle East and North African countries was not as a result of governance. This therefore suggests that there is need to balance effective internally generated revenue policy drive that will curb corruption and promote sound governance in order to drive economic growth for the nation.

### **Conclusion**

This study examined the effect of internally generated revenue, corruption and governance on economic growth of Nigeria. To achieve this major objective, data was sourced from statistical bulletin of National Bureau of Statistics, Central Bank of Nigeria Reports, World Governance Index from World Governance Institute and Corruption Perception Index (score) from Transparency International. The recent technique of Autoregressive Distributed Lag Model (ARDL) technique as introduced by (Shin, Byungchul, & Matthew, 2014) was used to capture the regression of internally generated revenue, corruption and governance on economic growth of Nigeria from 1981 to 2019. The study further provided an insight as to the extent to which each of the independent variables mentioned above affect the dependent variable.

The result shows that internally generated revenue has positive effect on economic growth of Nigeria. Also a reducing corruption was found to enhance economic growth. When corruption score improves, there is a corresponding increase in economic growth. The result

further presents that governance has positive effect on economic growth. As governance index increases, there is a positive increase in economic growth. The endogenous growth theory and the fraud theory have been used to provide explanation on the ability of a nation's economy to grow using internally generated revenue, reduced corruption and improved governance. If there is good governance structure and adequate punishment is placed on corruption, there is the tendency that revenue officials will all revenue collected on behalf of the government.

### References

- [1] Abiola, G. A., & Ehigiamusoe, U. K. (2014). Analysis of Internally Generated Revenue and Its Implications on Fiscal Viability of States Governments in Nigeria. *Journal of Empirical Economies* , 2 (3), 216-229.
- [2] Adegbe, F. F., Jaiyeoba, O., & Kwabai, J. D. (2013). The Effect of Internal Revenue Generation on Infrastructure Development: A Case Study of Lagos State Internal Revenue Service. *Journal of Education and Social Research* , 3 (2), 419-436.
- [3] Adesoji, A., & Chike, F. (2013). The Effect of Internal Revenue Generation on Infrastructural Development: A Study of Lagos State Internal Revenue Service. *Journal of Educational and Social Research* , 3 (2), 419-439.
- [4] Afolabi, J. O. (2019). The Impact of Governance on Economic Development in West Africa. *AUDEconomica* , 15 (3), 217-231.
- [5] Ahmad, E., Ullah, M. A., & Arfeen, M. I. (2012). Does Corruption Affects Economic Growth. *Latin American Journal of Economics* , 49 (2), 275-305.
- [6] Ajaz, T., & Ahmad, E. (2010). The Effect of Corruption and Governance on Tax Revenue. *The Pakistan Development Review*. 49(4), pp. 405-417. Islamabad: Pakistan Institute of Development Economics.
- [7] Akai, N., & Sakata, M. (2002). Fiscal decentralization contributes to economic growth: evidence from state-level cross-section data for the United States. *Journal of Urban Economics* , 52, 93-108.
- [8] Akcigit, U., & Kerr, W. (2018). Growth through heterogeneous innovations. *Journal of Political Economy* , 126 (4), 1374-1443.
- [9] Alao, D. O., & Alao, E. M. (2013). Strategic Control and Revenue Generation: A Critical Success Factor in Local Government Using the Balanced Scorecard. *Arabian Journal of Business and Management Review (Nigerian Chapter)* (1), 24-35.
- [10] Alege, S. O., Adamu, M., & Muhammad, S. A. (2014). Effects of Corruption on Economic Development in Nigeria. *Global Journal of Interdisciplinary Social Sciences* , 3 (3), 209-215.
- [11] Amin, A. (2018). impact of internally generated revenue on community development :a case study of Asa Local Government Area, Kwara State. *International Journal of Politics and Good Governance* , IX (9.2 Quater II), 1-38.
- [12] Anas, M. (2017). Governance and Economic Growth in Africa. *International Journal of Economics and Financial Research* , 3 (12), 323-331.

- [13] Arrow, K. J. (1969). The Organization of Economic Activity: Issues Perinent to the Choice of Market Versus Non-Market Allocations. *Joint Economic Committee of Congress* , 1-16.
- [14] Asaolu, T. O., Olabisi, J., Akinbode, S. O., & Alebiousu, O. N. (2018). Tax Revenue and Economic Growth in Nigeria. *Scholedge International Journal of Management & Development* , 05 (07), 72-85.
- [15] Asimiyu, A., & Kizito, E. (2014). Analysis of Internally Generated Revenue and Its Implications on Fiscal Viability of State Governments in Nigeria. *Journal of Empirical Economies* , 2 (4), 216-228.
- [16] Ayeni, A. P., Ibrahim, J., & Adeyemi, A. O. (2017). Tax Revenue and Economic Growth. *European Journal of Accounting, Auditing and Finance Research* , Vol.5 (No.11), 75-85.
- [17] Basem, E., Abdulkasem, D., Elham, A., & Basim, O. (2016). The Impact of Corruption on Economic Growth in Organisations of Islamic Countries. *International Journal of Economics and Finance* , 8.
- [18] Benz, A. (2010). *Governance* . Berlin: Springer.
- [19] Bevir, M. (2009). *Key Concepts in Governance*. Los Angeles: Sage.
- [20] Brautigam, D. A., & Knack, S. (2004). Foreign Aid, Institutions and Governance in Sub-Saharan Africa. *Economic Development and Cultural Change* , 52 (2), 255-285.
- [21] Brondolo, J., Silvani, C., E. Borgne, E., & Bosch, F. (2008). Tax Administration Reform and Fiscal Adjustment: The Case of Indonesia (2001-07). 08/129. IMF Working Paper.
- [22] Carega, M., & Weingast, B. R. (2011). Fiscal Federalism, good Governance and Economic Growth in Mexico. 1-55.
- [23] Coyle, D. (2014). *GDP: A brief but affectionate history*. Oxford and Oxford: Princeton University Press.
- [24] Criminal Code Act. (1990). Criminal Code Act, Chapter 77, Laws of the Federation of Nigeria.
- [25] Dang, D. Y., Bako, E., & Lalu, I. D. (2018). Impact of Revenue Generation and Utilization on Social Service Delivery in Plateau State: 2006 - 2015. *Tax Academy Research Journal (TARJ)* , 29-48.
- [26] Danilo Lučić, Mladen Radišić & Dušan Dobromirov. (2016). Causality between corruption and the level of GDP. *Economic Research* , 29 (1), 360-379.
- [27] Deloitte. (2016). *Internally generated revenue: what are the short term options at State level?* Blog.
- [28] Ekpo, A. U., & Inyikalum, D. B. (2016). Fiscal federalism and national development: analysis of internally generated revenue profile of component states in Nigeria. *International Journal of Innovative Research in Multidiciplinary Field* , 2 (10), 496-503.
- [29] Emara, N., & Chiu, I. (2016). The Impact of Governance on Economic Growth of Middle Eastern and North African Countries. *Topics in Middle Eastern and African Economies* , 18 (1), 126-144.

- [30] Eteng, F. O., & Agbor, U. I. (2018). The Challenges of Internal Revenue Generation and Inclusive Development of Local Government in Cross River State, Nigeria. *International Journal of Public Administration and Management Research* , 4 (4), 1-9.
- [31] Ezeani, O. (2004). Electoral Malpractice in Nigeria: The Case of 2003 General Elections. *Nigerian Journal of Public Administration and Local Government* , XI (1), 143-162.
- [32] Fabayo, J. A., Posu, S. M., & Obisanya, A. A. (2011). Corruption and the Investment Climate in Nigeria. *Journal of Economics and Sustainable Development* , 115-129.
- [33] Fagan, G., Gaspar, V., & McAdam, P. (2016). Immanuel Kant and Endogenous Growth Theory. *Scottish Journal of Political Economy* , 63 (5), 427-442.
- [34] Fayissa, B., & Nsiyah, C. (2013). Impact of Governance on Economic Growth in Africa. *Journal of Developing Areas* , 91-108.
- [35] Fine, B. (2000). Endogenous Growth: A Critical Assessment. *Cambridge Journal of Economics* .
- [36] Gbato, A. (2017). Impact of Taxation on Growth in Sub-Saharan Africa: New Evidence Based on a New Data Set. *International Journal of Economics and Finance* , 9 (11), 173-193.
- [37] Gupta, S., Davoodi, H., & Alonso-Terme, R. (2002). Does Corruption Affect Income Inequality and Poverty? *Economics of Governance* , 3, 23-45.
- [38] Hale, T., & Held, D. (2011). *Handbook of Transnational Governance*. Cambridge: Polity Press.
- [39] Ikejiani-Clark, M. (2001). Corruption in Nigeria in Ozioko, J. O. C. and Onuoha J. I. (eds). *Contemporary Issues in Social Sciences* , 108-125.
- [40] Ironkwe, U. I., & Ndah, E. N. (2016). Impact of Internally Generated Revenue On Performance of Local Government In Rivers State, Nigeria. *International Journal of Business & Law Research* , 4 (4), 42-58.
- [41] Iyoha, M. A. (2004). *Applied econometrics* (Second ed.). Benin City, Nigeria: Mindex Publishing.
- [42] Jonada, T. (2014). Examining the relationship of Corruption with Economic Growth, Poverty and Gender Inequality Albanian Case. *European Journal of Social Sciences Education and Research* , 1 (1).
- [43] Jones, I. C. (2019). Paul Romer: Ideas, Nonrivalry, and Endogenous Growth. *Scandinavian Journal of Economics* , 121 (3), 859-883.
- [44] Laeven, L., Levine, R., & Michalopoulos, S. (2015). Financial innovation and endogenous growth. *Journal of Financial Intermediation* , 24 (1), 1-24.
- [45] Levi-Faur, D. (2012). *The Oxford Handbook of Governance*. Oxford: Oxford University Press.
- [46] Lucas, R. (1988). On the mechanics of economic development. *Journal of Monetary Economics* , 22 (1), 3-42.
- [47] Martini, M. (2014, September 26). Nigeria: Evidence of corruption and the influence of social norms. *Anti-Corruption Resource Centre* , 2014 (20), pp. 1-12.
- [48] Mehmet, U., & Nandini, D. (2012, January). Corruption and Economic Growth: A Meta-Analysis of The Evidence on Low-Income Countries and Beyond. *ResearchGate* .

- [49] Mobolaji, H. I., & Omoteso, K. (2014, July). Corruption, Governance and Economic Growth in Sub-Saharan Africa: A Need for the Prioritisation of Reform Policies. *Social Responsibility Journal* .
- [50] Muhammad, I. J., Roshaiza, T., & Muhammad, I. F. (2014). Tax Revenue, Stock Market and Economic Growth of Pakistan. *ACTA UNIVERSITATIS DANUBIUS* , 10 (5), 136-148.
- [51] Mustapha, M. Z., Eric H. Y. Koh, E. H., Chan, S., & Ramly, Z. (2017). The Role of Corruption Control in Moderating the Relationship Between Value Added Tax and Income Inequality. *International Journal of Economics and Financial Issues* , 7 (4), 459-467.
- [52] National Tax Policy. (2012). *National Tax Policy* .
- [53] Ndogbo, P., & Fouda, M. (2012). Is 'Good' Governance Good for Business? A Cross-National Analysis of Firms in African Countries. *Journal of World Business* , 47, 435-449.
- [54] Nguyen, N. T., Mai, D. B., & Tran, O. T. (2017). Effect of Corruption on Economic Growth - Empirical Studies of Asia Countries. *Imperial Journal of Interdisciplinary Research* , 3 (7), 791-803.
- [55] Nigerian Constituion. (1999). *The Constitution of the Federal Republic of Nigeria*. Abuja: Federal Ministry of Information Press .
- [56] Nightingale, K. (2002). *Taxation Theory and Practices* (4 ed.). England: Pearson Education Ltd.
- [57] Nkanor, S. Y., & Udu, G. O. (2016). Effect of internally generated revenue on infrastructural development of Ebonyi State (2011 – 2014). *International Journal of Research in Business Management* , 4 (5), 71-84.
- [58] Nnanseh, M., & Akpan, S. A. (2013). The Effect of Internally Generated Revenue (IGR) and Infrastructural Development in Akwa Ibom State. *European Journal of Business and Management* , Vol.5 (31), 164-172.
- [59] Ofoegbu, F. I., & Alonge, H. O. (2016). Internally generated revenue and effectiveness of university administration in Nigeria. *Journal of Education and Learning* .
- [60] Ogbonnaya, A. K. (2018). Effect of Corruption in Nigeria Economy: A Critical View. *International Journal of Academic Research in Business and Social Sciences* , 8 (6), 120–128.
- [61] Oguzhan, C. D., & Gunlap, B. (2012). Corruption and Income Inequality in the United States. *Contemporary Economic Policy* , 30 (2), 283-292.
- [62] Okeke, M. I., Mba, C., & Eme, O. I. (2017). Enhancing Internally Generated Revenue: Issues, Strategies, Foresight & Insights. *Specialty Journal of Humanities and Cultural Science* , 2 (1), 1-22.
- [63] Okolie, D., & Eze, F. (2004). *Local Government Administration in Nigeria*. Enugu: John Jacob Classic Publishers Ltd.
- [64] Okwara, C. C., & Amori, O. M. (2017). Impact of Tax Revenue on Economic Growth in Nigeria. *International Journal of Scientific Research in Social Sciences & Management Studies* , 2 (2), 90-102.
- [65] Okwori, J., & Sule, A. (2016). Revenue Sources and Economic Growth in Nigeria: An Appraisal. *Journal of Economics and Sustainable Development* , 7 (8), 113-123.

- [66] Oladejo, M. O., & Alade, B. J. (2017). Internnaly Generated Revenue and The Revenue Profile of Selected South Western State Governments in Nigeria. *IMPACT: International Journal of Research in Business Management (IMPACT: IJRBM)* , 5 (12), 13-28.
- [67] Olaoye, F. O., & Adedeji, Q. A. (2017). Performance Benchmarking Of Selected Southwest States. *Advances in Social Sciences Research Journal* , 4 (24), 88-94.
- [68] Olusola, O. O. (2011). Boosting Internally Generated Revenue in Local Government. *European Journal of Humanities and Social Sciences* , 8 (1).
- [69] Olusola, O. O., & Siyanbola, T. L. (2014). The Role of Internally Generated Revenue in Local Government Administration in Nigeria. *Journal of Business Management & Social Sciences Research* , 3 (5), 40-44.
- [70] Omodero, C. O. (2019). The Implication of Corruption on Economic Progress of Nigeria. *Review of European Studies* , 11 (2), 109-116.
- [71] Omodero, C. O., Ekwe, M. C., & Ihendinihu, J. U. (2018). The Impact of Internally Generated Revenue on Economic Development in Nigeria. *Accounting and Finance Research* , 7 (2).
- [72] Onakoya, A. B., Afintinni, O. I., & Ogundajo, G. O. (2017). Taxation Revenue and Economic Growth in Africa. *Journal of Accounting and Taxation* , 3 (2), 11-22.
- [73] Ondo, A. (2017). Corruption and Economic Growth: The Case of the Economic and Monetary Community of Central Africa. *Theorretial Economics of Letters* , 7 (5), 1292-1305.
- [74] Onuoha, D. O., Ibe, A., Njoku, C. U., & Onuoha, J. I. (2015). Analysis of The Gross Domestic Product (G.D.P) of Nigeria:1960-2012. *West African Journal of Industrial & Academic Research* , 14 (1), 81-90.
- [75] Ortigueira, S., & Santos, M. S. (1997). On the Speed of Convergence in Endogenous Growth Models. *American Economic Review* , 383-399.
- [76] Oti, P. A., & Odey, F. I. (2017). Analysis of internally generated revenue and capital expenditure utilization in Cross River state, Nigeria. *International Journal of Development and Economic Sustainability* , 6 (1), 9-18.
- [77] Pilling, D. (2018). *The growth delusion: Wealth, poverty, and the well-being of nations*. New York: Tim Duggan Books.
- [78] Pitchford, J. D. (1990). External Debt and Foreign Investment. *Economic Analysis and Policy* , 20 (1), 17-32.
- [79] Romer, P. (1986). Increasing returns and long-run growth. *Journal of Political Economy* , 94 (5), 1002-1037.
- [80] Romer, P. M. (1994). The Origins of Endogenous Growth. *The Journal of Economic Perspectives* , 8 (1), 3-22.
- [81] Romer, P. (2018). *Macroeconomic theory*. Berkeley: University of California.
- [82] Sergio, R. (1991). Long Run Policy Analysis and Long Run Growth. *Journal of Political Economy* , 99 (3), 500.
- [83] Sheiner, L., & Dynan, K. (2018, August). GDP as a Measure of Economic Well-being. *Hutchins Center on Fiscal and Monetary Policy, The Brookings Institution* , pp. 1-53.

- [84] Siyanbola, T. J., Dada, S. O., & Olusola, O. O. (2014). Impact of Internally Generated Revenue on Total Revenue Accruing to State Government in Nigeria. *GE International Journal of Management Research* , 2 (8), 31-45.
- [85] Solow, R. M. (1956). A Contribution to the Theory of Economic Growth. *Quarterly Journal of Economics* , 70, 65-94.
- [86] Tamyko, Y., Albareda, A., & Forberger, S. (05 December 2014.). What is Governance. In Y. Tamyko, A. Albareda, & S. Forberger, *Governance of addictions in Europe* (pp. 8-16). London: ResearchGate.
- [87] Tolu, L., & Ogunro, K. V. (2012). Combating Corruption in Nigeria. *International Journal of Academic Research in Economics and Management Science* , 1 (4).
- [88] Trabelsi, M. A., & Trabelsi, H. (2017, September 11). At what level of corruption does economic growth decrease? *Munich Personal RePEc Archive* , pp. 1-7.
- [89] Transparency International. (2013). *Transparency International*.
- [90] Ukwame, S. O. (2015). Economic Growth of Nigeria: An Emperical Determinant and Causal Relationship (1980 - 2012). *American Journals of Economics* , 5 (1), 9-20.
- [91] Wang, P. (2018). *Elementary Endogenous Growth Theory*. St. Louis: Washington University .
- [92] World Bank. (1997). *The State in a Changing World*. New York: World Bank and Oxford University Press.
- [93] World Governance Indicators. (2019). *World Governance Indicators*. Natural Resource Governance Institute (NRGI) and World Bank Development Research Group. The World Bank Group.
- [94] Wouter, E., & Albert, D. (2009, January). Institutions and the Relation between Corruption and Economic Growth. *NiCE Working Paper 09-104* . Nijmegen: Nijmegen Center for Economics (NiCE).
- [95] Zhang, W. B. (2018). *Economic Growth Theory: Capital, Knowledge, and Economic Structures*. Routledge.

## Appendix

### Data Obtained and Used for the Study

Year	Total Real GDP (N)	Internally Generated Revenue (N'b)	Corruption Perception Index, Score
1981	15,258.00	4.87	
1982	14,985.08	3.69	
1983	13,849.73	3.29	
1984	13,779.26	3.04	
1985	14,953.91	5.71	
1986	15,237.99	6.35	
1987	15,263.93	8.31	
1988	16,215.37	9.94	
1989	17,294.68	16.34	
1990	19,305.63	28.98	
1991	19,199.06	21.51	

1992	19,620.19	31.62	
1993	19,927.99	37.43	
1994	19,979.12	53.85	
1995	20,353.20	154.54	
1996	21,177.92	136.49	6.9
1997	21,789.10	195.88	17
1998	22,332.87	171.84	19
1999	22,449.41	263.56	16
2000	23,688.28	359.43	12
2001	25,267.54	968.90	10
2002	28,957.71	601.01	16
2003	31,709.45	639.74	14
2004	35,020.55	722.30	16
2005	37,474.95	931.88	19
2006	39,995.50	825.99	22
2007	42,922.41	1,591.61	22
2008	46,012.52	1,800.26	27
2009	49,856.10	2,139.94	25
2010	54,612.26	2,691.63	24
2011	57,511.04	2,778.78	24
2012	59,929.89	3,203.51	27
2013	63,218.72	3,636.87	25
2014	67,152.79	4,112.81	27
2015	69,023.93	3,862.19	26
2016	67,931.24	3,753.18	28
2017	68,490.98	4,385.74	27
2018	63,218.72	4,761.70	27
2019	67,152.79	5,499.43	26

**Source: Researcher's Computation 2021**